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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,941	04/05/2007	Gordon Kenneth Andrew Oswald	1418-49	5288
23117 NIXON & VA N	7590 06/08/200 NDERHYE, PC	EXAMINER		
901 NORTH G	LEBE ROAD, 11TH F	LOOR	SOTOMAYOR, JOHN B	
ARLINGTON, VA 22203			ART UNIT	PAPER NUMBER
			3662	
			MAIL DATE	DELIVERY MODE
			06/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/577,941	OSWALD ET AL.				
Office Action Summary	Examiner	Art Unit				
	John B. Sotomayor	3662				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	- [.] action is non-final.					
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closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
oloood in absordance with the plactice and of E	x parte quayre, 1000 o.b. 11, 10					
Disposition of Claims						
4)⊠ Claim(s) <u>1-30 and 90</u> is/are pending in the appl	ication.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-30 and 90</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement					
O) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner						
10)⊠ The drawing(s) filed on <u>30 May 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
The dath of declaration is objected to by the Ext	animer. Note the attached office	7.60.01.01.01.11.1.10.102.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents	s have been received					
•		on No				
_ : : : : : : : : : : : : : : : : : : :	2. Certified copies of the priority documents have been received in Application No					
·	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Paper No(s)/Mail Date						
3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☑ Notice of Informal Patent Application 6) ☑ Other:						
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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

- 2. The information disclosure statement filed May 3, 2006 has been entered and considered. An initialed copy of the PTO-1449 by the Examiner is attached.
- 3. The information disclosure statement filed April 5, 2007 has been entered and considered. An initialed copy of the PTO-1449 by the Examiner is attached.

Drawings

4. The drawings filed May 3, 2006 are objected to because all boxes in the Figures should have descriptive legends attached to them. Thus, the boxes in Figures 2, 7-10, and 29 should be labeled.

Claim Objections

5. Claims 2-5, 14-20, 22, 28 and 29 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the

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claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims are quasi-operational in that they set forth a desired operational characteristic without reciting means which would perform the desired function or provide structure which would further limit the claim upon which they depend. Examiner suggests using claim language such as: "comprising...", "further comprising...", or a proper means plus function claim language to further limit the subject matter of a previous claim.

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 2-5, 14-20, 22, 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are considered to be indefinite since it is unclear as to what exactly is being claimed for the reasons set forth in the above numbered paragraph 5.

8. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then

narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 15 recites the broad recitation 0.5GHz to 24GHz, and the claim also recites 2GHz to 12Ghz and 5.8GHz to 7.2GHz which is the narrower statement of the range/limitation.

Similarly there are ranges within a range present in claims 17-19.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

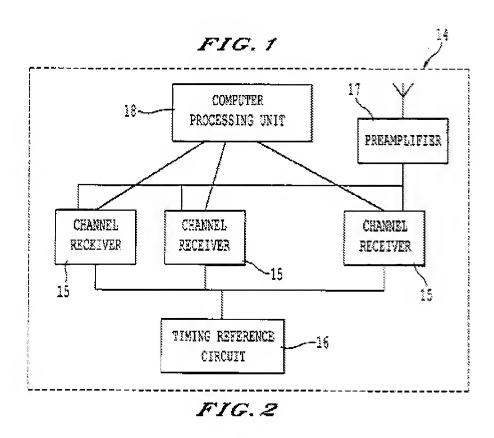
A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 1-30 and 90 are rejected under 35 U.S.C. 102(b) as being anticipated by Drane et al ('705) or Hoctor et al ('025).

The claims are considered to be met by either Drane et al ('705) or Hoctor et al ('025) who show, inter alia, a method and apparatus for determining positional data for an object including at least plural receivers, detector, and processor.

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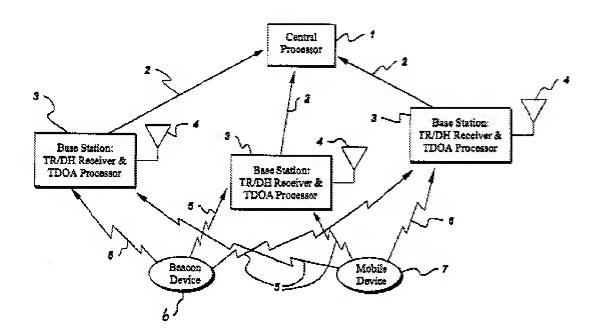
Drane et al ('705) show in Figure 1 below, plural receivers (15) and processor (18) in combination to determine the position of an object. The system also uses a matched filter. The selected transceivers could include a decoding algorithm that allows only those mobile transceivers to use the time-difference measurements supplied by the system and so calculate their position.



Hoctor et al ('025) show in Figure 1 below, plural receivers (3) and processor (1) in combination to determine the position of an object. The system also uses a matched filter. The transmitted data is encoded by the relative amplitude polarity of the two pulses.

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FIGURE 1



Conclusion

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art show various radar systems.
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Sotomayor whose telephone number is 571-272-6978. The examiner can normally be reached on Monday to Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom H. Tarcza, can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John B. Sotomayor/ Primary Examiner, Art Unit 3662